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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

07/11/2008

Martin D Moynihan
PRTSI, Inc
P O Box 16446
Arlington, VA 22215

EXAMINER

STARKS, WILBERT L

ART UNIT

PAPER NUMBER

2129

DATE MAILED: 07/11/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/633,824	08/07/2000	Arnold J. Goldman	2104/3	2492

TITLE OF INVENTION: STRATEGIC METHOD FOR PROCESS CONTROL

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$720	\$0	\$0	\$720	10/14/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail**

**Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

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Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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nonprovisional	YES	\$720	\$0	\$0	\$720	10/14/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
STARKS, WILBERT L.	2129	706-045000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/147; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

1

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

2

3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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EXAMINER

STARKS, WILBERT L

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1732 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1732 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

09/633,824

Applicant(s)

GOLDMAN ET AL.

Examiner

Wilbert L. Starks, Jr.

Art Unit

2129

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERIT IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's filing of 04/02/2007.
2. ☒ The allowed claim(s) is/are 1-73.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Wilbert L. Starks, Jr./
Primary Examiner, Art Unit 2129

Examiner's Amendment

Claim 33 initially has improper dependencies because they were claimed in the conjunctive. In one of those combinations, however, claims 30 through 33 are sequentially dependent. Therefore, correcting the claim to properly be disjunctive in its dependencies preserves Applicant's intent to have that alternative. Further, Claim 33 may be dependent on Claims 30 or 31. Claim 33 is amended as follows:

33. The method according to Claims 30, 31, [and] or 32 wherein arranging the smoothed characterized data into a look-up table includes using the look-up table for designating at least one process control recipe for use at the predetermined process juncture.

/Wilbert L. Starks, Jr./

Primary Examiner, Art Unit 2129

DETAILED ACTION

Reasons for Allowance

Claims 1-73 are allowed.

Claims 1-73 are statutory because Applicant stated the following in the Specification, page 36, last full paragraph:

Preferably, before the present invention can implement its unique algorithms for optimizing process control, the preferred embodiment algorithm initiates validating whether there is a significant correlation between input sets of data and output sets of data at a given stage in a process. A validated significant correlation is a precondition to properly carrying out process control with the present invention. That is, validating a supposed correlation between two steps in the manufacturing process must first be done, so that the subsequently formulated algorithmic function can better perform improved yield or improved efficiency Automated Process Control.

Therefore, the practical application of the claimed invention is to the improvement of yield or efficiency in manufacturing processes. This is further indicated in Applicant's most recent argument in his 02 APR 2007 filing. There, Applicant argues the following:

Claim 1 is amended to recite that manufacturing stages of a manufacturing process. The use of interconnection cells are to connect input and output data of the stage in order to make a prediction model that connects between the input and output data for the stage. The user then chooses the output he wants and finds the input or settings that give rise thereto. He then physically applies the settings to the manufacturing process. The claim is written such that it cannot be infringed by

anyone who does not apply the settings to a manufacturing process, but rather requires the user to physically apply the settings to a manufacturing process, thereby modifying the manufacturing process. A manufacturing process and a method of modifying the process is patentable subject matter. Since a person would have to apply settings to an actual manufacturing process and thereby modify the process it is submitted that the claim as a whole is allowable. That is to say the claim taken as a whole requires a modification to an actual manufacturing process, and this is irrespective of how the individual cell is defined, although the claim clearly defines that the interconnection cell is associated with the manufacturing stage.

Corresponding amendments have been made to the remaining independent claims 41, 49, 51, 53, 57, 58 and 62, and these claims are believed to be allowable for the same reasons.

These statements by Applicant provide file wrapper estoppel to the argued practical applications. Therefore, to the extent that the practical applications are the ones argued and based on the cited support found in the Specification, the claims are statutory.

The following is an Examiner's statement of reasons for allowance:

Claims 1-73 are considered allowable since when reading the claims in light of the specification, as per MPEP §2111.01, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in independent claim 1, including: an "interconnection cell" (as defined at page 12, lines 1 through 4 and at page 15, lines 23 through 27 and at page 16, lines 15 through 26 and at page 17, lines 1 through 15 and at page 18, lines 10 through 26 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 21, lines 15 through 26 and at page 22, lines 1 through 15 and at page 32, lines 1 through 10 and at page 34, lines 1 through 10 and at page 36, lines 23 through 26 and at page 37, lines 10 through 26 and at page 41, lines 1 through 10), a "predictive model" (as defined at page 86, lines 1

through 20 and at page 90, lines 1 through 10 and at page 91, lines 1 through 6 and at page 92, lines 10 through 26 and at page 93, lines 1 through 14), a set of "parameters" (as defined at page 7, lines 1 through 10 and at page 10, lines 1 through 10 and at page 13, lines 1 through 5 and at page 14, lines 15 through 26 and at page 16, lines 15 through 26 and at page 19, lines 15 through 20 and at page 20, lines 5 through 10 and at page 21, lines 1 through 25 and at page 22, lines 10 through 15 and at page 32, lines 1 through 27 and at page 39, lines 11 through 27 and at page 41, lines 10 through 27 and at page 42, lines 1 through 10 and at page 47, lines 1 through 26 and at page 48, lines 1 through 26 and at page 49, lines 1 through 26 and at page 50, lines 1 through 27 and at page 51, lines 1 through 25 and at page 52, lines 1 through 20 and at page 53, lines 10 through 25 and at page 56, lines 1 through 25 and at page 55, lines 1 through 25 and at page 57, lines 10 through 24 and at page 59, lines 10 through 25), a set of "clusters" (as defined at page 18, lines 15 through 25 and at page 19, lines 1 through 25 and at page 20, lines 18 through 25 and at page 32, lines 15 through 27 and at page 38, lines 10 through 15 and at page 39, lines 1 through 10 and at page 41, lines 15 through 27 and at page 42, lines 24 through 26 and at page 43, lines 1 through 3).

Further, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in independent claim 41, including: an "interconnection cell" (as defined at page 12, lines 1 through 4 and at page 15, lines 23 through 27 and at page 16, lines 15 through 26 and at page 17, lines 1 through 15 and at page 18, lines 10 through 26 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 21, lines 15 through 26 and at page 22, lines 1 through 15

and at page 32, lines 1 through 10 and at page 34, lines 1 through 10 and at page 36, lines 23 through 26 and at page 37, lines 10 through 26 and at page 41, lines 1 through 10), a "predictive model" (as defined at page 86, lines 1 through 20 and at page 90, lines 1 through 10 and at page 91, lines 1 through 6 and at page 92, lines 10 through 26 and at page 93, lines 1 through 14), a set of "parameters" (as defined at page 7, lines 1 through 10 and at page 10, lines 1 through 10 and at page 13, lines 1 through 5 and at page 14, lines 15 through 26 and at page 16, lines 15 through 26 and at page 19, lines 15 through 20 and at page 20, lines 5 through 10 and at page 21, lines 1 through 25 and at page 22, lines 10 through 15 and at page 32, lines 1 through 27 and at page 39, lines 11 through 27 and at page 41, lines 10 through 27 and at page 42, lines 1 through 10 and at page 47, lines 1 through 26 and at page 48, lines 1 through 26 and at page 49, lines 1 through 26 and at page 50, lines 1 through 27 and at page 51, lines 1 through 25 and at page 52, lines 1 through 20 and at page 53, lines 10 through 25 and at page 56, lines 1 through 25 and at page 55, lines 1 through 25 and at page 57, lines 10 through 24 and at page 59, lines 10 through 25).

Further, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in independent claim 49, including: an "interconnection cell" (as defined at page 12, lines 1 through 4 and at page 15, lines 23 through 27 and at page 16, lines 15 through 26 and at page 17, lines 1 through 15 and at page 18, lines 10 through 26 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 21, lines 15 through 26 and at page 22, lines 1 through 15 and at page 32, lines 1 through 10 and at page 34, lines 1 through 10 and at page 36,

lines 23 through 26 and at page 37, lines 10 through 26 and at page 41, lines 1 through 10), a "predictive model" (as defined at page 86, lines 1 through 20 and at page 90, lines 1 through 10 and at page 91, lines 1 through 6 and at page 92, lines 10 through 26 and at page 93, lines 1 through 14), a set of "parameters" (as defined at page 7, lines 1 through 10 and at page 10, lines 1 through 10 and at page 13, lines 1 through 5 and at page 14, lines 15 through 26 and at page 16, lines 15 through 26 and at page 19, lines 15 through 20 and at page 20, lines 5 through 10 and at page 21, lines 1 through 25 and at page 22, lines 10 through 15 and at page 32, lines 1 through 27 and at page 39, lines 11 through 27 and at page 41, lines 10 through 27 and at page 42, lines 1 through 10 and at page 47, lines 1 through 26 and at page 48, lines 1 through 26 and at page 49, lines 1 through 26 and at page 50, lines 1 through 27 and at page 51, lines 1 through 25 and at page 52, lines 1 through 20 and at page 53, lines 10 through 25 and at page 56, lines 1 through 25 and at page 55, lines 1 through 25 and at page 57, lines 10 through 24 and at page 59, lines 10 through 25), a "juncture" (as defined at page 7, lines 1 through 20 and at page 10, lines 1 through 10 and at page 11, lines 15 through 20 and at page 12, lines 24 through 26 and at page 14, lines 15 through 20 and at page 15, lines 5 through 27 and at page 16, lines 1 through 15 and at page 18, lines 1 through 10 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 22, lines 5 through 20 and at page 31, lines 10 through 25 and at page 32, lines 1 through 27 and at page 41, lines 1 through 10 and at page 43, lines 1 through 5 and at page 53, lines 1 through 5 and at page 54, lines 15 through 25 and at page 55, lines 1 through 5 and at page 58, lines 20 through 27).

Further, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in independent claim 51, including: an "interconnection cell" (as defined at page 12, lines 1 through 4 and at page 15, lines 23 through 27 and at page 16, lines 15 through 26 and at page 17, lines 1 through 15 and at page 18, lines 10 through 26 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 21, lines 15 through 26 and at page 22, lines 1 through 15 and at page 32, lines 1 through 10 and at page 34, lines 1 through 10 and at page 36, lines 23 through 26 and at page 37, lines 10 through 26 and at page 41, lines 1 through 10), a "predictive model" (as defined at page 86, lines 1 through 20 and at page 90, lines 1 through 10 and at page 91, lines 1 through 6 and at page 92, lines 10 through 26 and at page 93, lines 1 through 14), a set of "parameters" (as defined at page 7, lines 1 through 10 and at page 10, lines 1 through 10 and at page 13, lines 1 through 5 and at page 14, lines 15 through 26 and at page 16, lines 15 through 26 and at page 19, lines 15 through 20 and at page 20, lines 5 through 10 and at page 21, lines 1 through 25 and at page 22, lines 10 through 15 and at page 32, lines 1 through 27 and at page 39, lines 11 through 27 and at page 41, lines 10 through 27 and at page 42, lines 1 through 10 and at page 47, lines 1 through 26 and at page 48, lines 1 through 26 and at page 49, lines 1 through 26 and at page 50, lines 1 through 27 and at page 51, lines 1 through 25 and at page 52, lines 1 through 20 and at page 53, lines 10 through 25 and at page 56, lines 1 through 25 and at page 55, lines 1 through 25 and at page 57, lines 10 through 24 and at page 59, lines 10 through 25), a "juncture" (as defined at page 7, lines 1 through 20 and at page 10, lines 1 through 10 and at page 11, lines 15 through

20 and at page 12, lines 24 through 26 and at page 14, lines 15 through 20 and at page 15, lines 5 through 27 and at page 16, lines 1 through 15 and at page 18, lines 1 through 10 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 22, lines 5 through 20 and at page 31, lines 10 through 25 and at page 32, lines 1 through 27 and at page 41, lines 1 through 10 and at page 43, lines 1 through 5 and at page 53, lines 1 through 5 and at page 54, lines 15 through 25 and at page 55, lines 1 through 5 and at page 58, lines 20 through 27).

Further, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in independent claim 53, including: an "interconnection cell" (as defined at page 12, lines 1 through 4 and at page 15, lines 23 through 27 and at page 16, lines 15 through 26 and at page 17, lines 1 through 15 and at page 18, lines 10 through 26 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 21, lines 15 through 26 and at page 22, lines 1 through 15 and at page 32, lines 1 through 10 and at page 34, lines 1 through 10 and at page 36, lines 23 through 26 and at page 37, lines 10 through 26 and at page 41, lines 1 through 10), a "predictive model" (as defined at page 86, lines 1 through 20 and at page 90, lines 1 through 10 and at page 91, lines 1 through 6 and at page 92, lines 10 through 26 and at page 93, lines 1 through 14), a set of "parameters" (as defined at page 7, lines 1 through 10 and at page 10, lines 1 through 10 and at page 13, lines 1 through 5 and at page 14, lines 15 through 26 and at page 16, lines 15 through 26 and at page 19, lines 15 through 20 and at page 20, lines 5 through 10 and at page 21, lines 1 through 25 and at page 22, lines 10 through 15 and at page 32, lines 1 through 27 and at page 39,

lines 11 through 27 and at page 41, lines 10 through 27 and at page 42, lines 1 through 10 and at page 47, lines 1 through 26 and at page 48, lines 1 through 26 and at page 49, lines 1 through 26 and at page 50, lines 1 through 27 and at page 51, lines 1 through 25 and at page 52, lines 1 through 20 and at page 53, lines 10 through 25 and at page 56, lines 1 through 25 and at page 55, lines 1 through 25 and at page 57, lines 10 through 24 and at page 59, lines 10 through 25), a "juncture" (as defined at page 7, lines 1 through 20 and at page 10, lines 1 through 10 and at page 11, lines 15 through 20 and at page 12, lines 24 through 26 and at page 14, lines 15 through 20 and at page 15, lines 5 through 27 and at page 16, lines 1 through 15 and at page 18, lines 1 through 10 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 22, lines 5 through 20 and at page 31, lines 10 through 25 and at page 32, lines 1 through 27 and at page 41, lines 1 through 10 and at page 43, lines 1 through 5 and at page 53, lines 1 through 5 and at page 54, lines 15 through 25 and at page 55, lines 1 through 5 and at page 58, lines 20 through 27).

Further, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in independent claim 57, including: an "interconnection cell" (as defined at page 12, lines 1 through 4 and at page 15, lines 23 through 27 and at page 16, lines 15 through 26 and at page 17, lines 1 through 15 and at page 18, lines 10 through 26 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 21, lines 15 through 26 and at page 22, lines 1 through 15 and at page 32, lines 1 through 10 and at page 34, lines 1 through 10 and at page 36, lines 23 through 26 and at page 37, lines 10 through 26 and at page 41, lines 1 through

10), a "predictive model" (as defined at page 86, lines 1 through 20 and at page 90, lines 1 through 10 and at page 91, lines 1 through 6 and at page 92, lines 10 through 26 and at page 93, lines 1 through 14), a set of "parameters" (as defined at page 7, lines 1 through 10 and at page 10, lines 1 through 10 and at page 13, lines 1 through 5 and at page 14, lines 15 through 26 and at page 16, lines 15 through 26 and at page 19, lines 15 through 20 and at page 20, lines 5 through 10 and at page 21, lines 1 through 25 and at page 22, lines 10 through 15 and at page 32, lines 1 through 27 and at page 39, lines 11 through 27 and at page 41, lines 10 through 27 and at page 42, lines 1 through 10 and at page 47, lines 1 through 26 and at page 48, lines 1 through 26 and at page 49, lines 1 through 26 and at page 50, lines 1 through 27 and at page 51, lines 1 through 25 and at page 52, lines 1 through 20 and at page 53, lines 10 through 25 and at page 56, lines 1 through 25 and at page 55, lines 1 through 25 and at page 57, lines 10 through 24 and at page 59, lines 10 through 25), a "juncture" (as defined at page 7, lines 1 through 20 and at page 10, lines 1 through 10 and at page 11, lines 15 through 20 and at page 12, lines 24 through 26 and at page 14, lines 15 through 20 and at page 15, lines 5 through 27 and at page 16, lines 1 through 15 and at page 18, lines 1 through 10 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 22, lines 5 through 20 and at page 31, lines 10 through 25 and at page 32, lines 1 through 27 and at page 41, lines 1 through 10 and at page 43, lines 1 through 5 and at page 53, lines 1 through 5 and at page 54, lines 15 through 25 and at page 55, lines 1 through 5 and at page 58, lines 20 through 27).

Further, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in independent claim 58, including: an "interconnection cell" (as defined at page 12, lines 1 through 4 and at page 15, lines 23 through 27 and at page 16, lines 15 through 26 and at page 17, lines 1 through 15 and at page 18, lines 10 through 26 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 21, lines 15 through 26 and at page 22, lines 1 through 15 and at page 32, lines 1 through 10 and at page 34, lines 1 through 10 and at page 36, lines 23 through 26 and at page 37, lines 10 through 26 and at page 41, lines 1 through 10), a "predictive model" (as defined at page 86, lines 1 through 20 and at page 90, lines 1 through 10 and at page 91, lines 1 through 6 and at page 92, lines 10 through 26 and at page 93, lines 1 through 14), a set of "parameters" (as defined at page 7, lines 1 through 10 and at page 10, lines 1 through 10 and at page 13, lines 1 through 5 and at page 14, lines 15 through 26 and at page 16, lines 15 through 26 and at page 19, lines 15 through 20 and at page 20, lines 5 through 10 and at page 21, lines 1 through 25 and at page 22, lines 10 through 15 and at page 32, lines 1 through 27 and at page 39, lines 11 through 27 and at page 41, lines 10 through 27 and at page 42, lines 1 through 10 and at page 47, lines 1 through 26 and at page 48, lines 1 through 26 and at page 49, lines 1 through 26 and at page 50, lines 1 through 27 and at page 51, lines 1 through 25 and at page 52, lines 1 through 20 and at page 53, lines 10 through 25 and at page 56, lines 1 through 25 and at page 55, lines 1 through 25 and at page 57, lines 10 through 24 and at page 59, lines 10 through 25), a "juncture" (as defined at page 7, lines 1 through 20 and at page 10, lines 1 through 10 and at page 11, lines 15 through

20 and at page 12, lines 24 through 26 and at page 14, lines 15 through 20 and at page 15, lines 5 through 27 and at page 16, lines 1 through 15 and at page 18, lines 1 through 10 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 22, lines 5 through 20 and at page 31, lines 10 through 25 and at page 32, lines 1 through 27 and at page 41, lines 1 through 10 and at page 43, lines 1 through 5 and at page 53, lines 1 through 5 and at page 54, lines 15 through 25 and at page 55, lines 1 through 5 and at page 58, lines 20 through 27).

Further, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in independent claim 62, including: an "interconnection cell" (as defined at page 12, lines 1 through 4 and at page 15, lines 23 through 27 and at page 16, lines 15 through 26 and at page 17, lines 1 through 15 and at page 18, lines 10 through 26 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 21, lines 15 through 26 and at page 22, lines 1 through 15 and at page 32, lines 1 through 10 and at page 34, lines 1 through 10 and at page 36, lines 23 through 26 and at page 37, lines 10 through 26 and at page 41, lines 1 through 10), a "predictive model" (as defined at page 86, lines 1 through 20 and at page 90, lines 1 through 10 and at page 91, lines 1 through 6 and at page 92, lines 10 through 26 and at page 93, lines 1 through 14), a "junction" (as defined at page 7, lines 1 through 20 and at page 10, lines 1 through 10 and at page 11, lines 15 through 20 and at page 12, lines 24 through 26 and at page 14, lines 15 through 20 and at page 15, lines 5 through 27 and at page 16, lines 1 through 15 and at page 18, lines 1 through 10 and at page 19, lines 1 through 25 and at page 20, lines 1 through 10 and at page 22, lines 5

through 20 and at page 31, lines 10 through 25 and at page 32, lines 1 through 27 and at page 41, lines 1 through 10 and at page 43, lines 1 through 5 and at page 53, lines 1 through 5 and at page 54, lines 15 through 25 and at page 55, lines 1 through 5 and at page 58, lines 20 through 27).

Only to the extent that these features are not found in the prior art of record is the present case allowable over the prior art.

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

- A. Diekhans et al. (U.S. Patent Number 5,828,971 A; Dated 27 OCT 1998; Class 701; Subclass 041) discloses an automatic steering device for an electrically controllable hydraulic steering system, especially for an agricultural vehicle.
- B. Hansen (U.S. Patent Number 5,394,322 A; Dated 28 FEB 1995; Class 700; Subclass 037) discloses a self-tuning controller that extracts process model characteristics.

- C. Mischenko et al. (U.S. Patent Number 4,926,105 A; Dated 15 MAY 1990; Class 318; Subclass 800) discloses a method of induction motor control and electric drive realizing this method.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

Alternatively, inquiries may be directed to the following:

S. P. E. David Vincent	(571) 272-3080
Official (FAX)	(571) 273-8300

/Wilbert L. Starks, Jr./

Primary Examiner, Art Unit 2129

WLS

06 JUL 2008